

## Middlefield-Ellis-Whisman (MEW) Study Area Update

United States Environmental Protection Agency • Region 9 • April 2003

## **AIR SAMPLING BEGINS**

The U.S. Environmental Protection Agency (EPA) will begin air sampling to assess the potential indoor and outdoor air quality impacts from site contamination at the Middlefield-Ellis-Whisman (MEW) Study Area. Air sampling is expected to begin in May 2003.

New information concerning the toxicity of trichloroethene (TCE) and potential air quality impacts from possible vapor intrusion and air stripper treatment system emissions has led EPA to further evaluate the air pathway at all four Mountain View sites, including the MEW Study Area. While EPA is currently evaluating these potential air quality impacts, EPA believes that there is no immediate, short-term health concern.

#### **Background**

The MEW Study Area (Site) includes three Superfund Sites: Fairchild Semiconductor - Mountain View; Intel Corporation - Mountain View; and Raytheon Company. The MEW Study Area and the former facilities and companies responsible for the investigation and cleanup (referred to as MEW Companies) are shown in Figure 1. The MEW Site includes contamination of groundwater with volatile organic compounds (VOCs). The primary chemicals of concern in the groundwater are trichloroethene (TCE) and its breakdown products cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride. TCE is a solvent that has been widely used by industry as a cleaning and degreasing agent. TCE is a VOC, which means it evaporates readily in air.

The soil contamination at the MEW Site has been cleaned up. The MEW Companies are currently cleaning up the groundwater contamination at the MEW Site. Cleanup of the groundwater will continue for many decades in order to meet the groundwater cleanup standards. In addition, it is important to note that the groundwater in the area is not used for drinking water or other household uses.

#### **Vapor Intrusion and Indoor Air Pathway**

EPA is evaluating whether VOCs in groundwater or from air stripper treatment system emissions are potentially impacting indoor air quality in buildings overlying the TCE contamination plume in shallow groundwater or outdoor air in the surrounding area. New information concerning the toxicity of TCE and potential air quality impacts has prompted EPA to further evaluate the air pathway at the

MEW Site. Because VOCs can evaporate easily in air, vapors from the groundwater can potentially, under certain circumstances, migrate upward through the soils and cracks in the floors or through plumbing conduits and enter into buildings.

Many factors affect whether such vapors can accumulate at levels of concern inside a building. These include: how volatile the chemical is; the nature of the soil subsurface; the chemical concentrations in soil, soil gas, and groundwater; the depth to groundwater; and the type and construction of the overlying buildings.

The indoor air pathway is complex, and indoor air quality is affected by many factors other than subsurface vapor intrusion. Some of the most significant impacts on indoor air quality come from the use of consumer products, and from outdoor air. EPA Region 9 is currently using the provisional TCE toxicity values when assessing the potential long-term health risks from possible vapor intrusion. These provisional values are set at protective levels to provide a sufficient margin of safety for everyone, including sensitive individuals.

#### **MEW Air Sampling**

EPA has been working with the MEW Companies to test the indoor and outdoor air in the MEW Study Area. Indoor air samples will be collected inside selected buildings overlying the highest concentrations of the TCE groundwater plume within the MEW Site. Outdoor air samples will be collected at the air intakes to the heating ventilation and air conditioning (HVAC) systems

## AIR STRIPPERS BEING REPLACED AT FORMER FAIRCHILD PROPERTIES

EPA is pleased to announce that Schlumberger Technology has voluntarily agreed to remove the three existing air stripping groundwater treatment systems at the former Fairchild Semiconductor properties and replace them with liquid-phase granular activated carbon treatment systems. Liquid-phase carbon treatment systems will result in virtually no VOC emissions. The three groundwater extraction and treatment systems have been temporarily shut down to allow each air stripper to be removed and replaced with new liquid carbon treatment systems. This temporary shutdown will not result in any additional health risk. Startup and testing of the new treatment systems are expected to begin in July 2003.

of the selected MEW buildings. Outdoor air samples will also be collected at reference locations (residential, commercial areas) outside the MEW

commercial areas) outside the MEW Site to compare ambient air to indoor air sample results. The sampling activities are fairly straightforward and should not be intrusive. The sampling involves placing a stainless steel canister at approximately three to five feet above the ground (breathing height), collecting the canister after the sampling period, and sending it to the laboratory for VOC analysis.

#### What's Next

After sampling is concluded and the data are verified, EPA will evaluate the results and will share the sampling results and evaluation with the community. A summary of all the sample results from the MEW Air Investigation will also be available to the public at the Mountain View Public Library at 585 Franklin Street. Based on levels that we have seen in air sampling results collected at the GTE site and Moffett Community Housing Areas (Orion Park and Wescoat Housing Areas), EPA does not anticipate levels that are an immediate concern or would pose a short-term health risk.

However, if we find levels of concern, EPA will take immediate action to ensure workers and nearby residents are protected from Site contamination.

#### **Contacting EPA**

If you would like more information, or if you have questions about the MEW Study Area, please contact:

#### Alana Lee

Project Manager (SFD-7-3) lee.alana@epa.gov (415) 972-3141

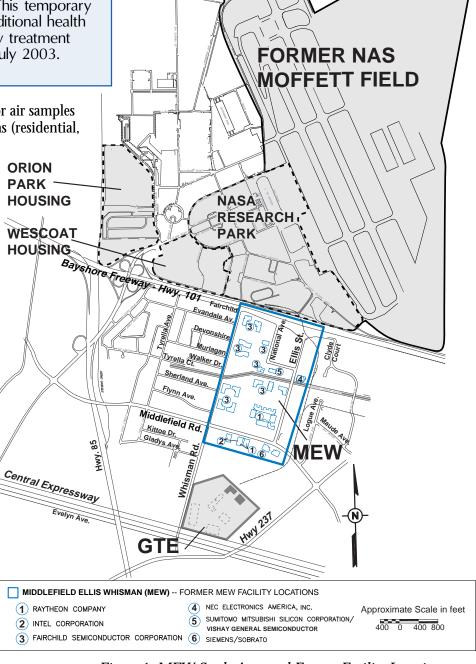


Figure 1: MEW Study Area and Former Facility Locations

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#### **David Cooper**

Community Involvement Coordinator (SFD-3) cooper.david@epa.gov (415) 972-3237

Or you may leave a message on EPA's Toll-Free Information Line: (800) 231-3075 and we will return your call.

http://www.epa/region09

#### **Community Advisory Group Forming**

At an EPA-sponsored meeting on April 9, 2003 more than 140 interested community members and stakeholders voted unanimously to form a Community Advisory Group (CAG) for the four federal cleanup sites in Mountain View. The purpose of the CAG is to help people interested in the MEW, Moffett, GTE and JASCO sites be more involved in the cleanup decision-making process. A CAG is a good way for people to learn more about the sites and make their voices heard.

At future meetings, CAG members and other interested participants will hear presentations on cleanup status and site issues. There will be opportunities to discuss site cleanup issues with EPA and other interested parties. The first formal CAG meeting is scheduled for Wednesday,

## DO YOU NEED SPANISH OR OTHER LANGUAGE TRANSLATION?

EPA is assessing the Spanish and other translation needs for the federal cleanup sites in Mountain View, including the MEW Study Area. If you need translation service for future fact sheets or meetings related to the MEW Study Area and/or other Mountain View sites, please use the mailing list coupon to indicate your needs. If you have other language needs, please indicate this on the mailing list coupon below. EPA will address other language needs on an individual basis.

May 14, 2003 at the Mountain View Community Center, 201 South Rengstorff Avenue. EPA staff will be available to answer questions from 6 pm to 7 pm in an "open house" format. The CAG meeting will be from 7 pm to 9 pm. Anyone interested in being on the CAG mailing list should fill out the mailing coupon. These CAG meetings are open to the public.

MAILING LIS	т Соиром
If you did not receive this fact sheet in the mail and would like to about the MEW Study Area and/or the Mountain View sites, pl David Cooper, Community Involvement Coordinator EPA, Region 9 75 Hawthorne Street (SFD-3) San Francisco, CA 94105  'Note: You may also email the following information to: C	lease fill out this coupon and return to:
Please indicate which site mailing lists you would like to be on:  MEW Study Area	Please indicate language needs:  Spanish translation for fact sheets  Spanish translation for public meetings  Other language translation needs  Please specify
Please indicate if you would like to be on the mailing list an Advisory Group. Please provide your e-mail address below.  PLEASE PRINT ALL INFORMATION  NAME:  ADDRESS:	
	MIL: (OPTIONAL)

# AIR SAMPLING BEGINS AT MEW STUDY AREA

#### **INFORMATION CENTERS**

Copies of MEW site-related documents including the air investigation sampling plans are available at the following locations:

Mountain View Public Library 585 Franklin Street Mountain View, CA 94041 (650) 903-6887



EPA Region 9 Superfund Records Center 95 Hawthorne Street, Suite 403S San Francisco, CA 94105 (415) 536-2000

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